

Material Properties: Simriz® 498 (FFKM)

NOTE - All testing done on AS568-214 size O-rings

Temperature Range: -5°C to +320°C

NOTE: Simriz 498 offers outstanding chemical and solvent resistance including compatibility with Nitric Acid and amine chemicals. It also exhibits excellent heat resistance up to 320°C.

Original Properties	AMS 7257C	Simriz 498
Hardness, Shore A, ASTM D2240	70 to 80	78
Tensile Strength, psi, ASTM D1414	1500 min.	2650
Ultimate Elongation, %, ASTM D1414	120 min.	161
AMS-3021 Fluid Immersion, ASTM D471 and ASTM D1414, 70 hrs. at 175°C		
Hardness change, Shore A, ASTM D2240	± 5	0
% Tensile Strength change, ASTM D1414	-10 max.	-9
% Elongation change, ASTM D1414	-15 max.	-7
% Volume change, ASTM D471	0 to +5	+1.0
AS1241 Type IV fluid immersion, ASTM D471 and ASTM D1414, 70 hrs. at 125°C		
Hardness change, Shore A, ASTM D2240	-15 to 0	-1
% Tensile Strength change, ASTM D1414	-40 max.	-12
% Elongation change, ASTM D1414	-15 max.	+2
% Volume change, ASTM D471	0 to +15	+2.9
ASTM Reference Fuel B Immersion, ASTM D471 and ASTM D1414, 70 hrs. at 23°C		
Hardness change, Shore A, ASTM D2240	± 5	-1
% Tensile Strength change, ASTM D1414	-20 max.	-13
% Elongation change, ASTM D1414	-15 max.	+2
% Volume change, ASTM D471	0 to +5	+0.4
Air Oven Aging, ASTM D573 and ASTM D1414, 70 hrs. at 290°C		
Hardness change, Shore A, ASTM D2240	± 5	0
% Tensile Strength change, ASTM D1414	-20 max.	-3
% Elongation change, ASTM D1414	-5 max.	+2
% Weight change, ASTM D297	-5 max.	-0.5
Compression Set, ASTM D395 Method B and ASTM D1414 70 hrs. at 230°C		
% Permanent set	40 max.	19.5
Low Temperature Retraction, ASTM D-1329		
TR-10, degrees C	+5 max.	0

Special Testing, not part of AMS 7257C

Compression Set, ASTM D395 Method B and ASTM D1414 70 hrs. at 600°F , 25% squeeze

% Permanent Set 40
Cracking or rupture NONE

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